

In the early part of the school year, my focus was to learn and implement specialized instructional interventions to a small group of students who do not respond to primary instruction alone. The rigorous curriculum has posed challenges for my students and the implementation of differentiated instruction will help them succeed in the new Common Core State Standard math curriculum. A pertinent source of new learning was reading The Differentiated Classroom by Carol Ann Tomlinson. When reading Tomlinson, I discovered that successful small group instruction can be attained by using the "learning triangle" method. This method is a three part system that encompasses the teacher, students and content. In order for the learning triangle to be successful, all three parts must be succinct and in order. If one of these areas is out of sync, the triangle is thrown out of balance and there will be disconnect between one of the three areas of that differentiated group. Tomlinson also mentions that the use of the learning triangle will help the small group of students learn the content, and thus get them back on level with the tier 1 students. (Tomlinson,99) When I evaluated chapter 4 in Tomlinson's book, I began to plan and think of ways to implement them in my classroom to reach my small group of students who were struggling.

When reflecting on my previous differentiation in math, I have not been keeping a direct correlation between all of the students, myself and content. The area that I have realized I am struggling in is getting my students to focus on the work in the small group. In regards to the "learning triangle" I have the teacher and curriculum portions intact, but the student portion has not been completely cohesive. Some students are initially hesitant to work with their peers in a small group. With time, consistent praise and measureable success, students will see the value of a small group as opposed to the whole class setting. My goal is to design differentiated math lessons, so the students are working with guided instruction on the same topic as the Tier 1 students. Previously, I have spent time working on math algorithms with small groups. When the students are working with me on the same topic as the rest of the class they will get that direct instruction and the learning triangle will remain intact. As I begin to implement the "learning triangle" it is very important that I use my curriculum to maintain a constant balance between my individual goals and overarching goals of the curriculum. My focus is on the application of division into everyday life situations. In order to reach this goal I will be providing my students with differentiated real life situations. These situations will be given to the students in a succinct way so they can identify the connection between the mathematical practice of division and the relationship that it has with real life scenarios. The content portion of the "learning triangle" will be succinct with the students and me to ensure that the content is being presented in a clear, direct manner in which students feel confident in understanding.

With the implementation of the "learning triangle" in my small group setting, students will know how our lessons, discussions and practices all relate to each other. The "learning triangle" will enable students to see that the skill of long division has many different facets that relate to everyday life. The goal for my students is that they will be able to bridge the gap between their understanding of the algorithm of division and the real life application of the skill. As long as the "learning triangle" is in place, students will see the relationship between the topics and successfully relate them to one another.

Through my research of strategies to differentiate learning in a small group setting, Tomlinson states that, "teaching meaning-rich tasks using specific skills" is another way to plan for differentiated

groups. (Tomlinson,99) The use of this strategy will help my differentiated group attain the skill that was being taught in our whole class lesson. With the implementation of the Common Core Curriculum, meaning- rich tasks are a vital part of our curriculum. As I further this unit of long division, I will begin to implement more meaning rich tasks in a way that shows the relationship between the content and real life situations. This is a more practical approach to learning which will prepare my students as 21<sup>st</sup> century learners.

The use of “meaning-rich” tasks will enable me to focus more deeply on mathematical topics that I have been focusing my Tier 1 instruction on. As I reflect on my students as learners, they are very focused on making a connection with real life. However, several students in my class have a difficult time connecting mathematical concepts to everyday life. The addition of “meaning-rich” tasks will give the students the ability to take the topic which they are learning about and relate it to everyday life. As the leader of the group, I will be able to present it in a smaller group setting. This will enable me to focus acutely on this topic with my small group. My goal is to see the strategy of a small groups becoming more beneficial to the learning process.

The use of “meaning-rich skills” will be a beneficial strategy to use for my differentiated groups. As I work with my students on these skills, they will begin to see the correlation between long division skills, and real life situations. Early on in my lessons I will implement these skills on a basic level focusing on initial computation and successful solving of long division problems. As our lesson gets more in depth, students will be asked to relate these skills to real life situations. My whole class setting will be where the initial implementation of the introduction of these conceptual skills will happen. As I assess my students on these skills, I will be able to identify those students in need. The students that I work with during intervention times will be given these skills in a closely monitored setting, with the final goal of them being able to successfully relate the skill of long dividing on a more conceptual level.

When revisiting weekly data discussions with my math coach as well as team members, I learned that when students are not responding to primary instruction, there are many ways to present the necessary curriculum to these students. Based on previous informal assessments I have given, I found that they were not as effective as formal assessments. I was able to see who could or could not divide, but since my goal is the conceptual real life use of division; I feel as though a formal assessment will be more indicative of the needs of my students. As a team, we decided to implement the strategy of identifying students in need of small group settings through formal assessments. The use of formal assessments will allow me to identify students who have not shown attainment of necessary skills. As I use these assessments it will allow me to identify students who I will be working with to closely teach mathematic skills.

Earlier in the school year I observed students that were having difficulty with long division. I felt as though through more whole class instruction, they would learn the algorithm and how to use this in real life situations. Based on the discussions I had with team members and my math coach, I began to think of ways to formally assess these students on the use of long division in real life situations. I will now begin to identify students who are not comprehending long division applications and begin working

with them in a small group setting. The use of the small group setting will give the students more direct instruction and allow me to monitor them more closely than in a whole group setting.

Formal assessments are a way to identify students who are not performing well in the classroom. The use of formal assessments will enable me to identify students who may not be responding to primary instruction. With the use of these assessments, I will be able to see a small group of students who are unable to use long division in real life situations. As I begin to work with these students in my group, they will be able to work on our concepts in a closely monitored setting. I will be able to assess the skills that these students have and build upon them in a timely manner. As I work with these students on a daily basis, I hope to see that students will be attaining more knowledge of the concepts. This setting will provide them with opportunities to work with their peers as well as their teacher and show growth throughout the use of a small directly instructed group setting.

When researching about cooperative learning groups in a small group setting I learned that having students work in a cohesive unit on a particular topic gives a more successful environment. In an article titled, "Cooperative Learning: Students working in small groups," Barbara Gross Davis states, "Small group work can help students master concepts and apply them to situations calling for complex applications of critical thinking skills." (Davis, 2010) While my focus is on students successfully long dividing, the culmination of this lesson is to have students relate this skill to real life situations and apply them in a more conceptual manner. With the small group setting in place, learning will be able to take place more effectively than the whole class setting.

The nature of a small group setting enables students to focus more specifically on a topic; therefore they will be more successful in applying mathematical concepts. While the rest of my class is working on a more complex area of division, I will be working with a small group of students who do not respond to primary instruction. When reflecting on Davis' article, I found that this small group setting will help students not only learn the necessary skills and concepts, but will allow students to apply these skills more critically to different situations.

When working with small, differentiated grouping, my students will be able to see the concepts in a more basic approach. The skills will be built on simultaneously, and as a result, students will not only be more confident in long division with real life applications, but they will be able to share these skills learned with their peers. My hope is that after this direct differentiation, this small group of students will be able to work with the whole class on more conceptualized thinking of long division. The skills and ways to apply them to real life will make these students feel as though they are contributing to the classroom discussion. At the conclusion of this unit, all of my students should be able to work cohesively with any level of students and all students will be on the same conceptual, real life level of long division.

As I look back on the 10 weeks that I have spent planning for students who do not respond to primary instruction alone, I have found many ways that will be very effective in reaching the students who do not respond to a whole group setting. My new learning from Tomlinson's The Differentiated Classroom has shed new light on ways to approach my differentiated group setting. The use of the

“learning triangle” and “meaning-rich tasks” will enable me to provide my differentiated groups a more cohesive unit of study that will ultimately show them the relationship between my teaching, our curriculum and their own learning. This small group setting will give the students more ownership in their learning and in turn, they will be able to identify the relationship between the skill of long division and the application and conceptualization of this to their own lives. The addition of “meaning-rich tasks” will also help my students connect the curriculum topics to real life situations. The ability for my students to relate what they are doing in our small group to what is going on in their life will help them become more accustomed to the usage of these skills in everyday life.

In addition to Tomlinson’s methods of differentiating groups, meetings with my school’s math coach and Gross’ strategies have also become a very helpful way to go about my planning for small group settings. The ability for me to be able to plan lessons that will help my small group of students master mathematical skills that call for complex application of critical thinking skills will help my students further themselves as 21<sup>st</sup> century learners. The addition of the CCSS will also help me as an educator and my students see mathematical concepts in a more conceptual and real life perspective.

While researching and planning ways to reach a small selection of students in my classroom that do not respond to primary instruction, I realized that it is very important for me to not only know my students as learners, but to know myself as an educator. This is important because the knowledge of these two areas will help me plan my lessons more accordingly. The ability for me to plan these lessons more interactively and engaging will ensure that my students are attaining these concepts not only in a whole group setting, but also in a differentiated small group setting.